

REMARKS

Claims 1-5, 7-8 and 10-18 are pending in the application and stand rejected. By the above amendment, claims 1, 2, 7, 8, 10 and 16 have been amended and claims 4 and 15 have been canceled without prejudice. Applicants request reconsideration of the claim rejections based on the following remarks.

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Claims 1-4, 7-8 and 10-17 were rejected as being anticipated by Cosman (U.S. Patent No. 6,405,072). It is respectfully submitted that at the very least, claims 1, 7 and 10 are patentably distinct and patentable over Cosman. For example, Cosman does not disclose a system or method that allows a user to *select a target point in a displayed digital image of a real scene to thereby project a laser light beam at a target point in the real scene which corresponds to the selected target point in the displayed digital image of the real scene*, as essentially claimed in claims 1, 7 and 10.

In the Response to Arguments Section of the Office Action, the Examiner seems to miss the point of Applicants' previous Arguments. Applicants arguments are not based solely on Applicants' disagreement with the Examiner's characterization of the teachings of Cosman, but rather the impropriety of the Examiner's application of Cosman's teachings to the claimed inventions. Indeed, Applicants respectfully submit that the Examiner's arguments are based on a misapplication of Cosmans' teachings to the elements of the claimed invention without due consideration given to the proper context of the claimed inventions as a whole.

To establish a *prima facie* case of anticipation, the Examiner must show that Cosman teaches the identical claimed inventions. Here, the anticipation rejections are seemingly premised merely on picking and choosing of different teachings of Cosman and applying

those teachings to the claimed inventions to reconstruct the claimed inventions is a way that renders the anticipation rejections inconsistent and legally defective. For illustrative purposes, the impropriety of the rejections for claims 1, 7 and 10 will be demonstrated by rewriting claim 1 below, for example, wherein the claim language is italicized and the Examiner's characterization of the claimed features with respect to Cosman's teachings are bolded. Based on the Examiner's arguments set forth on page 3 and 4 of the Office Action, the Examiner contends that Cosman teaches in FIGs. 1 and 4, Applicants' invention of claim 1 as follows:

Claim 1. *A method for illuminating a target point in a real scene, comprising the steps of:*

capturing a digital image of a scene (by a Camera C (17), (18) and (10)) ;

identifying image coordinates of a target point (locations of markers (20~24) on patient P) in the digital image of the scene, wherein identifying comprises:

displaying the digital image of the scene (display unit (39);

selecting a target point (marker(s)) in the displayed digital image of the scene (Col. 6, lines 45-49) ; and

determining image data coordinates corresponding to the selected target point (Col. 8, lines 32-43) ; and

projecting a laser light beam at a target point in the real scene, which corresponds to the selected target point in the displayed digital image, using the identified image coordinates (Light source (16), light from sources (17B) and (18B) (Col. 7, lines 61-64) in FIG. 2, illumination system (15) projecting light, Col. 12, lines 42-48 and lines 62-65, FIG. 6).

Here, the Examiner's characterization of claim 1 based on the cited sections of Cosman fails to establish a *prima facie* case of anticipation. To begin, the Examiner initially construes the claimed step of *identifying image coordinates of a target point in the digital image of the scene* as identifying image coordinates **locations of markers (20~24) on patient P in the digital image scene**. However, the Examiner seems to then ignore this interpretation with respect to interpretation and characterization of the remaining claim elements.

For instance, as noted above, the Examiner contends that the claimed step of *selecting a target point (marker(s)) in the displayed digital image of the scene* is disclosed in **Col. 6, lines 45-49** of Cosman. In other words, based on the Examiner's characterization of the **markers (20~24)** as being the claimed "**target points**", the Examiner seemingly argues that Cosman discloses (in **Col. 6, lines 45-49**) that Cosman teaches a process whereby one can *select a maker (20-24) in a displayed image of the scene*. However, there is nothing in **Col. 6, lines 45-49** of Cosman that even remotely teaches *selection of a maker (20-24) in a displayed image of the scene*. Moreover, the Examiner offers no explanation to support this seemingly erroneous characterization.

Similarly, based on the Examiner's characterization of the claim target point being the Cosman's markers (20-24), there is no basis for Examiner's characterization (**Col. 8, lines 32-43**) of Cosman as teaching *determining image data coordinates corresponding to the selected **marker (target point)***. Again, other than mere citation to the section, the Examiner fails to provide any reasonable explanation, much less any explanation, as to the basis for this assertion. Without any explanation, the Examiner's characterization and reliance on Cosman in this regard is baseless.

Finally, Cosman clearly does not disclose or suggest *projecting a laser light beam at a target point in the real scene* (i.e., the actual **marker (20~24) on patient P** as characterized by the Examiner), *which corresponds to the selected target point in the displayed digital image, using the identified image coordinates* (i.e., using the location of the **markers (20-24)** in the displayed image, as characterized by the Examiner). Again, with utter lack of explanation, the Examiner cites Cosmans's **Light source (16), light from sources (17B) and (18B) (Col. 7, lines 61-64) in FIG. 2, illumination system (15) projecting light, Col. 12, lines 42-48 and lines 62-65, FIG. 6** as teaching the claimed element. Clearly, this reliance is erroneous.

Although Cosman discloses in Fig. 2 LED light sources (17B) and (18B) fitted in annular rings around the cameras (17) and (18), there is nothing to suggest that the light sources can be controllably projected at any specific real target point on the Patient based on selection of a corresponding virtual target point in a displayed image, as contemplated by the claimed inventions. The light sources (17B) and (18B) are merely used to provide illumination for the cameras (17) and (18) which are stably secured to the ceiling of a treatment room (See, Col. 7, lines 53-64). Moreover, and in any event, there is nothing in Cosman that discloses that the light sources (16) and (15) are laser beam sources. The above arguments are equally applicable to claims 7 and 10.

In short, when the claims are properly construed and viewed as a whole, clearly, the cited sections of Cosman do not disclose or suggest a system and method that allows a user to select a target point in a displayed digital image of a real scene to thereby project a laser light beam at a target point in the real scene which corresponds to the selected target point in the displayed digital image of the real scene, as essentially claimed in claims 1, 7 and 10. Therefore, for at least the above reasons, claims 1, 7 and 10 are patentable over, and not

anticipated by, Cosman. Further, claims 2-3, 8, and 12-14 and 16-17 are patentable over, and not anticipated by, Cosman at least by virtue of their dependence from respective base claims 1, 7 or 10. Accordingly, withdrawal of the anticipation rejections is requested.

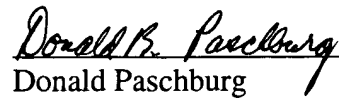
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Claims 5, 11 and 18 stand rejected as being obvious as follows:

- (i) claim 11 stands rejected as being unpatentable over Cosman; and
- (ii) claims 5 and 18 stand rejected as being unpatentable over Cosman in view of Kuban et al. (U.S. Patent No. 5,359,363 to Kuban et al.

The obviousness rejections are based, in part, on the assertion that Cosman discloses all elements of base claims 1 and 10. However, claim 11 is patentable over Cosman for at least the same reasons given above for claim 10, from which claim 11 depends. Further, claims 5 and 18 are patentable over the combination of Cosman and Kuban for at least the same reasons given above for claims 1 and 10, from which claims 5 and 18 depend, respectively. Clearly, without elaboration, Kuban does not cure the deficiencies of Cosman as discussed above with regard to claims 1, 7 and 10. Accordingly, withdrawal of the obvious rejections is respectfully requested.

Respectfully submitted,


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